

MICROSCOPIC COLITIS

# M MADE C CLEAR

# LIFE WITH MC

Frequently Asked Questions

For Patients

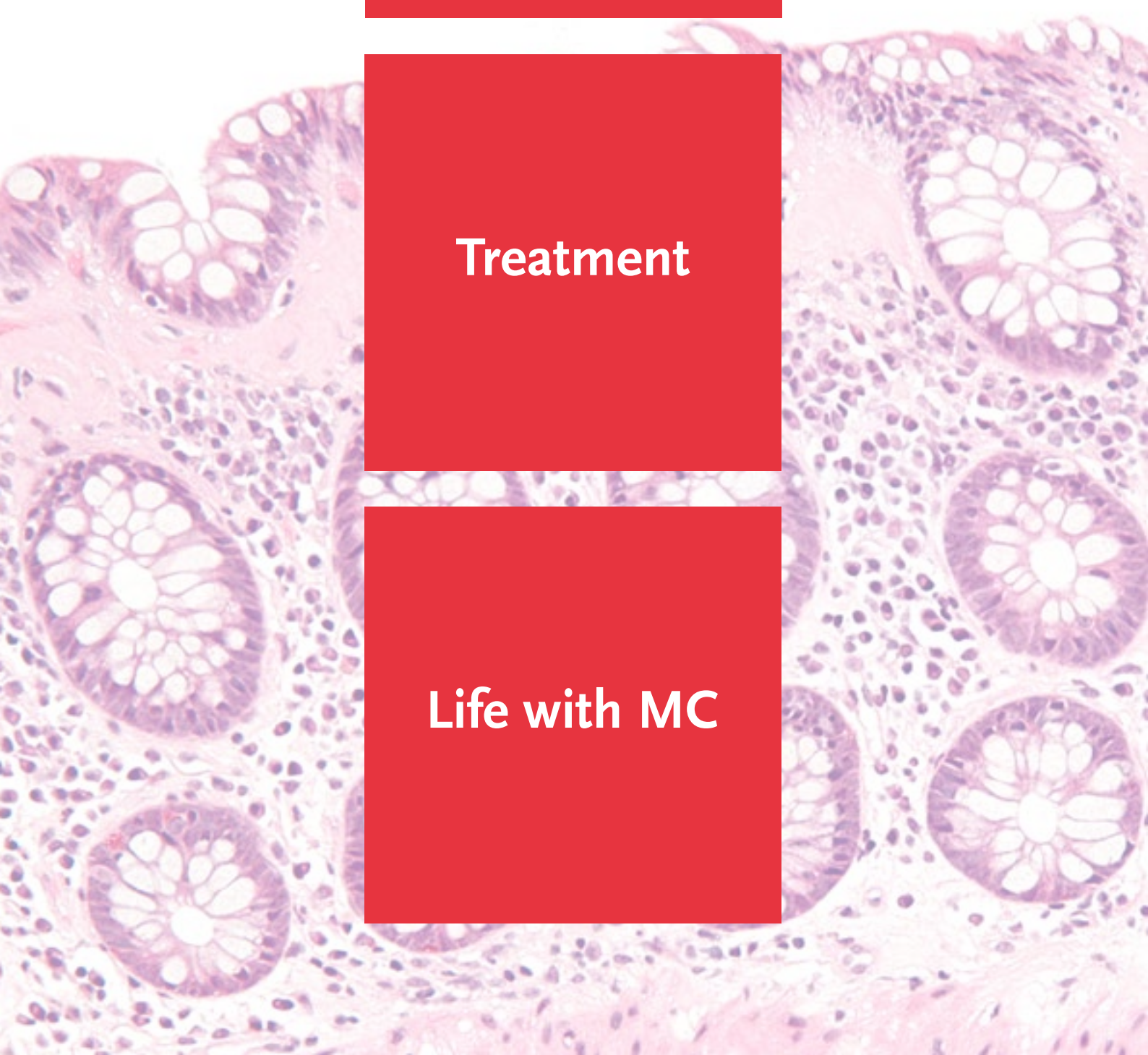




**Background**

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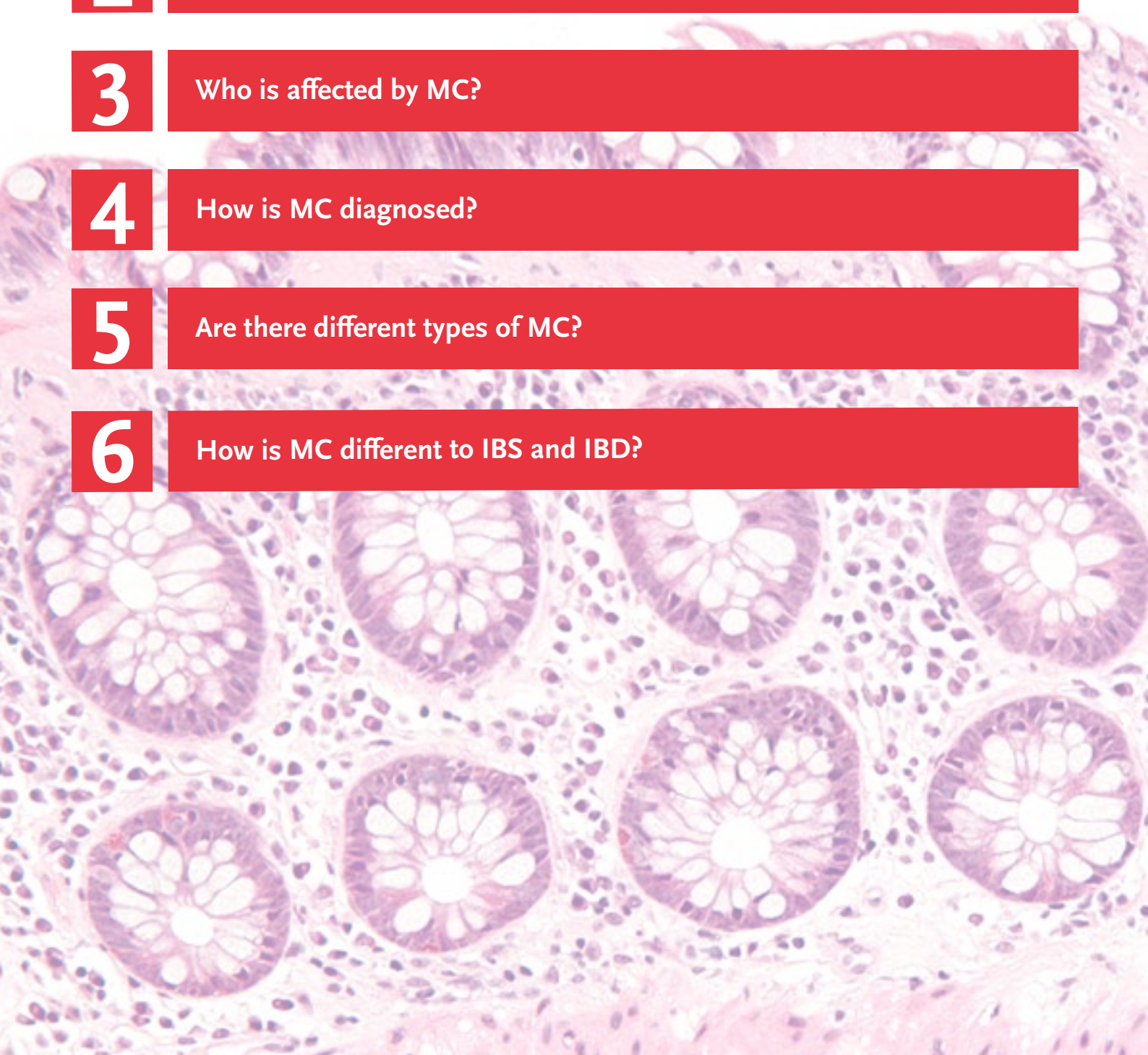
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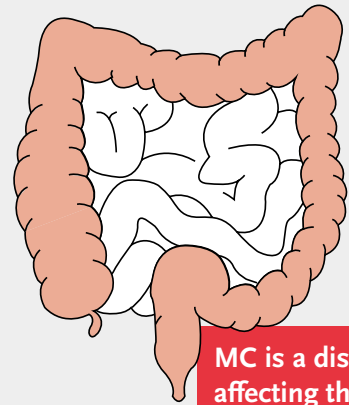
# What is MC?



Microscopic colitis (or MC for short) is an ongoing disease where inflammation in your bowel causes watery diarrhoea.<sup>1</sup> It gets its name because of the part of the large intestine affected (the colon), and because it can only be seen under a microscope.<sup>2</sup>

Following digestion and absorption in the small intestine, the undigested waste moves through your colon. The colon absorbs around 1.4 litres or two and a half pints of fluid from your waste daily, so that when you go to the toilet, your poo is nearly solid.<sup>3</sup>

If you've got MC, the cells lining your colon can't absorb fluid very well.<sup>1</sup> Because this water has nowhere to go, it passes out as watery diarrhoea.<sup>2</sup> Because this can happen as many as or even over 9 times a day, it can really impact everyday life.<sup>4,5</sup>



MC is a disease affecting the large intestine

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# What causes MC?



It's not exactly clear what causes MC but there are some things which can make it more likely to occur.

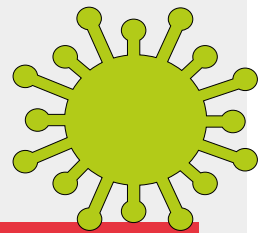
One thing that can increase the risk of MC is having another disease, such as rheumatoid arthritis, type 1 diabetes and coeliac disease.<sup>6</sup> Normally your gut contains good bacteria for healthy digestion. If you've had an infection in your gut before, you could develop MC because of changes in your gut bacteria.<sup>7</sup>

Some medicines for stomach ulcers and inflammation have been linked to MC.<sup>7</sup> Although these drugs may not cause MC directly, they can worsen diarrhoea which may lead to a diagnosis.<sup>8</sup>

If you smoke, you are twice as likely to develop the disease compared to someone who doesn't.<sup>9</sup> Smoking may also make you have watery stools more often, and for a longer time.<sup>6</sup> There is advice and support available if you would like to quit smoking. If you're wondering whether stopping the use of other drugs or vaping will help your MC, there is not yet evidence for this like there is for tobacco, however it may be helpful to your health.



Smokers are 2x more likely to develop MC



Gut infections have been linked to MC

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# Who is affected by MC?



MC affects around 1 in every 1,000 people.<sup>7</sup> While anyone can get MC, even children, it mainly affects women over 40.<sup>7</sup>

People over 65 are 5 times more likely to have MC than someone who's younger.<sup>10</sup> And around 7 out of every 10 sufferers are women.<sup>7</sup>



7/10 of sufferers are women

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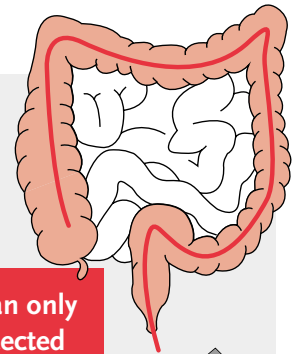
# How is MC diagnosed?



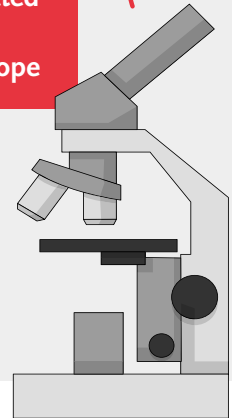
To diagnose MC, a doctor needs to look at your colon and take a sample of the tissue of the colon. This is done using a procedure called a colonoscopy.<sup>11</sup> In a colonoscopy, you will be given laxative, so your bowels are empty for the test. Though you will usually be awake for the procedure, you will be offered medicine to make you more comfortable. During the procedure the doctor will pass a long, thin, flexible tube with a camera at the end into your bottom.

If your colon looks normal, that doesn't rule out MC. Your doctor will still need to take a sample of tissue (biopsy) to check the cells under a microscope.<sup>7</sup> Changes to the appearance of tissue under the microscope will confirm whether you have the disease.

Checking these cells can take up to 2 weeks so don't be alarmed if you haven't had anything back from the hospital before this. If you do have MC you will be contacted by your healthcare professional.



MC can only be detected under a microscope



4 How is MC diagnosed?

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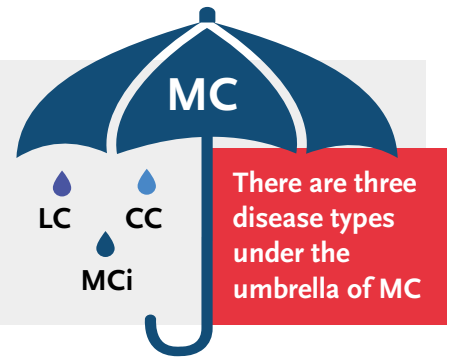
6 How is MC different to IBS and IBD?



# Are there different types of MC?



There are three different types of MC — collagenous colitis, lymphocytic colitis and incomplete microscopic colitis. The only difference between them is the way the tissues look under the microscope. All three types cause similar symptoms and are treated the same way.



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## How is MC different to IBS and IBD?



MC is a type of inflammatory bowel disease (IBD). It is the name given to the group of diseases where the large intestine becomes inflamed.<sup>12</sup> You may have heard the terms ulcerative colitis and Crohn's disease which are other types of IBD.

Unlike MC, irritable bowel syndrome (IBS) is not related to inflammation of the large intestine. MC can at first sight be mistaken for IBS.<sup>2</sup> But in IBS stool consistency varies between diarrhoea and constipation.<sup>11</sup> Diarrhoea in IBS does not often happen at night like it does with MC. MC is recognised because the diarrhoea is watery with no blood.<sup>13</sup> IBS patients often feel bloated and will have experienced stomach pain, all of which are not the most common symptoms of MC.<sup>11</sup>

For more information on the difference between IBS and MC, visit the MC Explained Atlas below:



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Does MC ever require surgery?



## Can MC symptoms be improved through diet?



You can make some diet changes to reduce your discomfort. First of all, MC patients are 50 times more likely to have coeliac disease (an allergy to gluten which is found in wheat, barley and rye).<sup>6</sup> This can easily be ruled out with a simple blood test.

You may find your symptoms improve when you have less caffeine, dairy and alcohol because these items can worsen inflammation in some people.<sup>15</sup> Spicy foods and high-fat, deep-fried foods may also worsen your diarrhoea. Everyone is different. So it may be useful to record a food diary for at least a month as this will help pinpoint specific foods which make your diarrhoea worse.



**Caffeine and dairy can worsen symptoms in some people**

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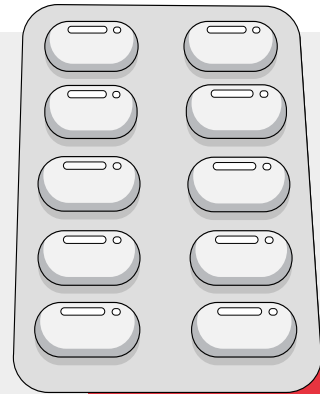


## What medical treatment is available for MC?



Budesonide is a steroid medication used to treat MC. You may hear this and think of the “steroids” used by bodybuilders, but this steroid is different — it treats inflammation.

Budesonide fights inflammation locally, right where it’s needed in your gut.<sup>15</sup> When you take budesonide, and it has worked on the inflammation, it’s absorbed from your digestive system. Then it’s transported to the liver where it’s mostly broken down.<sup>15</sup> Only a small amount travels around your bloodstream, so there’s a low risk of side effects.<sup>15</sup>



Steroids are used to treat MC

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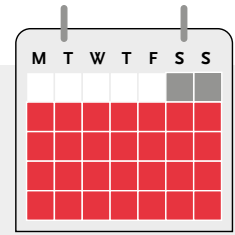
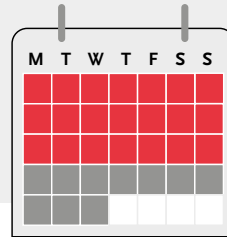
Does MC ever require surgery?



## How long is the course of treatment?



To start with, a daily dose of 9 mg budesonide (orally in the form of tablets or capsules) is prescribed for 6 to 8 weeks.<sup>7</sup> You may also be given a lower dose to take over the long term and keep the disease at bay.

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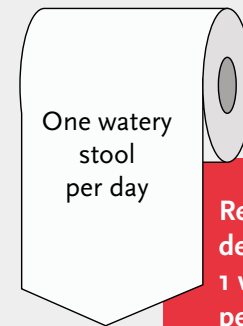


## How can you tell if the treatment is working?



You should know quite quickly if the treatment is working as you will need to go to the toilet less frequently and you may find fewer poos will be watery. After 8 weeks on budesonide the symptoms may be completely resolved.<sup>16</sup>

If you have 3 or fewer stools a day and only 1 of these is watery, healthcare professionals consider your MC to be in remission.<sup>7</sup> It may be helpful to keep a record of your toilet visits to monitor these signs.



Remission is defined as only 1 watery stool per day

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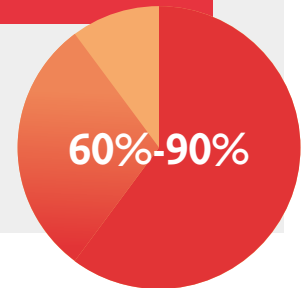
## What happens when you stop taking treatment after 8 weeks?



Sometimes your diarrhoea can reoccur once you finish your course of budesonide.<sup>17</sup> This happens in 60-90% of patients and can be as soon as 2 weeks after you stop taking budesonide.<sup>17,18</sup>

To help stop this happening, you may be given a lower dose of budesonide to take over the long-term and keep the disease at bay.<sup>7</sup> This is called maintenance therapy.<sup>17</sup>

After finishing a course of budesonide symptoms reappear in 60-90% of people



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## What happens if the symptoms reappear after stopping treatment?



Unfortunately MC isn't something that's curable so if you experience a relapse of symptoms after stopping treatment you will be prescribed 8 weeks of budesonide at 9 mg daily again.<sup>7</sup>

Importantly, the symptoms may return for a reason other than the medication, such as diet changes. As always, discuss any concerns with your healthcare professional.



Watery stools need monitoring

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## Are there any safety concerns with MC treatment?



Budesonide is tolerated well by the body.<sup>7</sup> We know this from multiple studies which compared a group of patients given budesonide long-term and a group that were given a placebo.<sup>19</sup> This is like a fake pill which has no active medicine in it. The same amount of people had side effects on budesonide as those taking the placebo, meaning it's tolerated well.<sup>19</sup>



Budesonide is well tolerated by the body

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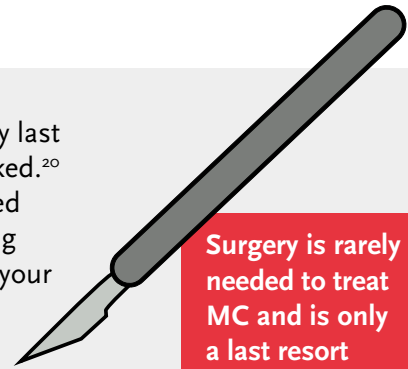
Does MC ever require surgery?



## Does MC ever require surgery?



Surgery is rarely needed to treat MC. It's only considered as a very last resort when medicine and all other forms of therapy haven't worked.<sup>20</sup> Your IBD team will be looking after you and will keep you informed during your care so you will be involved in any decisions regarding your care. The objective of any treatment is to help you maintain your quality of life which will inform any discussion.



Surgery is rarely needed to treat MC and is only a last resort

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Does MC affect fertility?

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Does MC eventually go by itself?

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Is MC linked to cancer?

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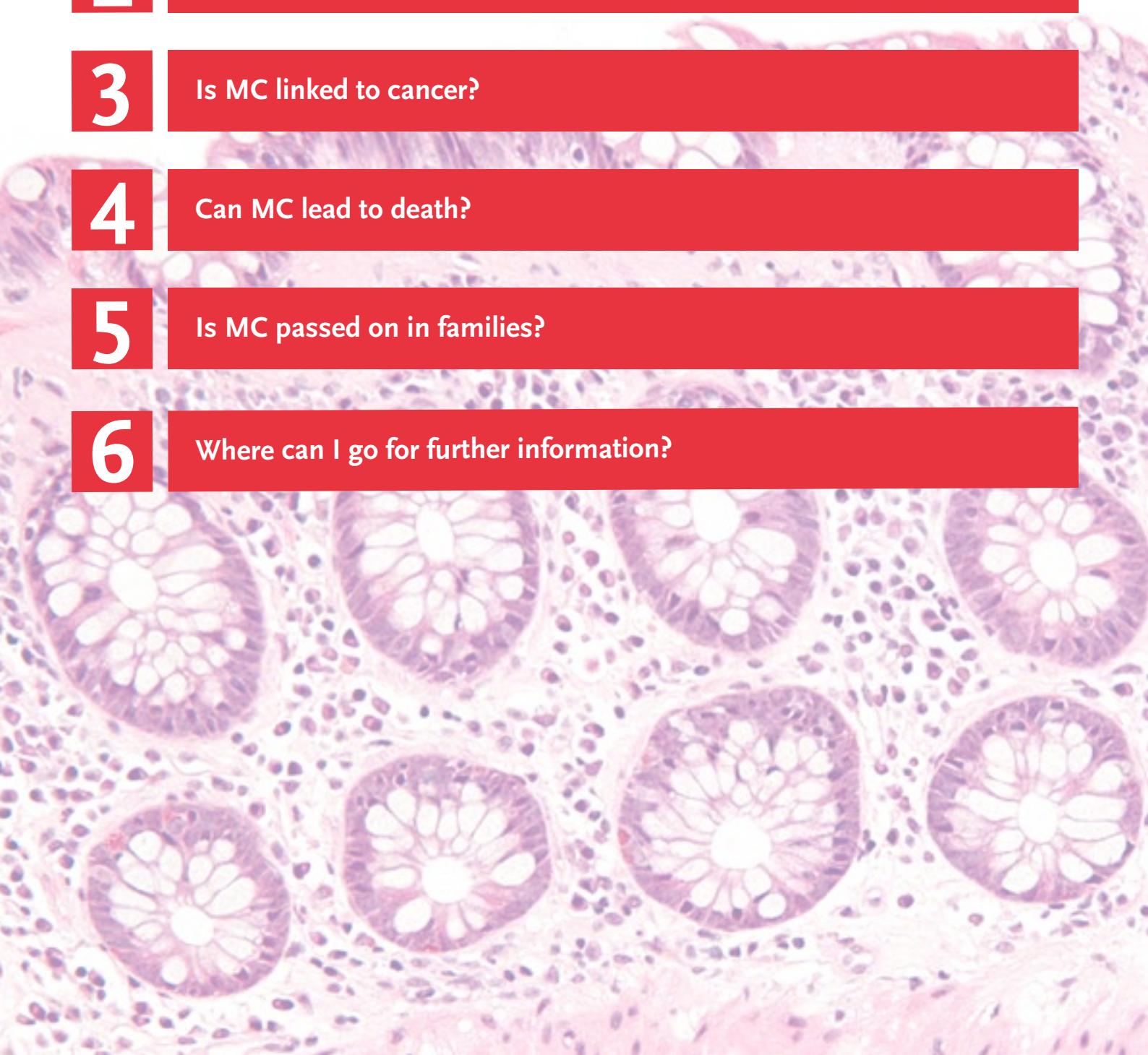
Can MC lead to death?

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Is MC passed on in families?

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## Does MC affect fertility?



Although the large majority of people are affected after their reproductive years, MC can affect women who are still fertile. However, it is possible to become pregnant following an MC diagnosis.<sup>7,21</sup>

Other inflammatory bowel diseases have been linked with problems in pregnancy, but MC has not.<sup>22</sup> More research on MC and fertility/pregnancy is required.

It's unlikely you would be prescribed budesonide during pregnancy unless essential.



It is possible to become pregnant after an MC diagnosis

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## Does MC eventually go by itself?



MC is typically an ongoing (chronic) condition.<sup>1</sup> So you need to keep taking treatment to keep the disease symptoms manageable. It's important to take the correct dose of medication on time, as well as follow diet advice.

Some people find disease symptoms stop and start over a long period of time.<sup>23</sup> But only 1 in 10 people with this condition will have the disease go away without any treatment.<sup>23</sup>



It's important to keep taking medication to manage symptoms

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Is MC linked to cancer?

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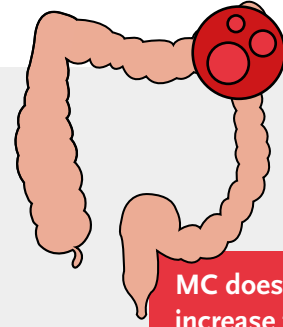


## Is MC linked to cancer?



Unlike other types of IBD, having MC does not increase your risk of developing colon cancer.<sup>5,24</sup> In fact, some research suggests the opposite! MC tissues may produce some molecules which work against colon cancer.<sup>25</sup>

If you do see blood in the stool then it's important to mention this change of symptoms to your healthcare professional.



MC doesn't increase the risk of developing colon cancer

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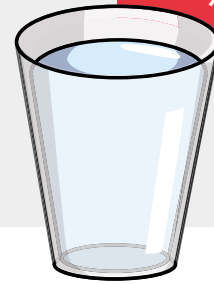


## Can MC lead to death?



There is no difference in mortality between people with MC and the general population.<sup>4</sup> Whilst MC isn't fatal itself, it is important to make sure you drink enough water to avoid becoming dehydrated as this can lead to kidney damage.<sup>6</sup>

It's important to stay hydrated



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## Is MC passed on in families?



MC cases are sometimes seen within the same family.<sup>23</sup> Some MC sufferers may have a family history of IBD, but we don't know whether the cause is genetic and can be passed on.<sup>23</sup> The risk of developing MC does, however, increase with other inherited conditions such as coeliac disease.<sup>6</sup>

It's unclear whether MC is genetic



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## Where can I go for further information?



For more information click below to see the MC patient leaflet by Dr Falk Pharma or visit the charity website Guts UK.

[MC Patient Leaflet](#)

[Guts UK Website](#)

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### Abbreviations

CC: collagenous colitis  
HCP: healthcare professional  
HRQoL: health-related quality of life  
IBD: inflammatory bowel disease  
IBS: irritable bowel syndrome  
LC: lymphocytic colitis  
MC: microscopic colitis  
MCi: incomplete microscopic colitis  
NSAID: non-steroidal anti-inflammatory drug  
PPI: proton pump inhibitor  
SSRI: selective serotonin re-uptake inhibitor  
UC: ulcerative colitis

### References

1. Miehke S *et al.* *Lancet Gastroenterol Hepatol* 2019; 4(4): 305-14.
2. Münch A *et al.* *Frontline Gastroenterol* 2020; 11(3): 228-34.
3. Nigam Y *et al.* *Nursing Times* 2019; 115(10): 50-3.
4. Townsend T *et al.* *Frontline Gastroenterol* 2019; 10(4): 388-93.
5. Münch A. *UEG Education* 2021; 21: 10-3.
6. Tome J *et al.* *Mayo Clin Proc* 2021; 96(5): 1302-8.
7. Miehke S *et al.* *United Eur Gastroenterol J* 2021; 9(1): 13-37.
8. Khalili H *et al.* *Gastroenterology* 2021; 160(5): 1599-1607.e5.
9. Burke KE *et al.* *J Crohns Colitis* 2018; 12(5): 559-67.
10. Fernández-Bañares F *et al.* *J Crohns Colitis* 2016; 10(7): 805-11.
11. Fedor I *et al.* *Ther Adv Chronic Dis* 2022; 13: 20406223221102821.
12. Walsh C. *Gastro Nurs* 2021; 19(9): 20-6.
13. Output of a round table discussion of UK physicians expert in the treatment of MC, supported by an educational grant from Dr Falk Pharma.
14. Campmans-Kuijpers MJE, Dijkstra G. *Nutrients* 2021; 13(4): 1067.
15. Miehke S *et al.* *J Gastroenterol Hepatol* 2018; 33(9): 1574-81.
16. Dietrich CF. UpToDate 2022. Available at: [uptodate.com/contents/microscopic-lymphocytic-and-collagenous-colitis-clinical-manifestations-diagnosis-and-management](https://www.uptodate.com/contents/microscopic-lymphocytic-and-collagenous-colitis-clinical-manifestations-diagnosis-and-management) Accessed 27.03.2023.
17. Münch A *et al.* *Gut* 2016; 65(1): 47-56.
18. Boland K, Nguyen GC. *Gastroenterol Hepatol (NY)* 2017; 13(11): 671-7.
19. Stewart MJ *et al.* *Clin Gastroenterol Hepatol* 2011; 9(10): 881-90.
20. Datta I *et al.* *Can J Surg* 2009; 52(5): E167-72.
21. Storr M. *IRSN Gastroenterol* 2013; 352718.
22. Mårild K *et al.* *EclinicalMedicine* 2022; 53: 101722.
23. Ohlsson B. *Therap Adv Gastroenterol* 2015; 8(1): 37-47.
24. Levy A *et al.* *BMC Gastroenterol* 2019; 19(1): 1.
25. Lushnikova A *et al.* *Front Med (Lausanne)* 2021; 8: 727412.